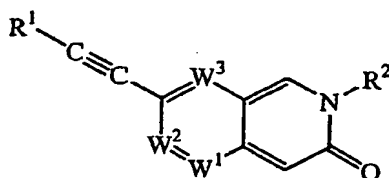


CLAIMS

What is claimed is:

1. A compound of Formula II



II

or a pharmaceutically acceptable salt thereof,

wherein:

R¹ is independently selected from:

C₅ or C₆ cycloalkyl-(C₁-C₈ alkylenyl);

Substituted C₅ or C₆ cycloalkyl-(C₁-C₈ alkylenyl);

C₈-C₁₀ bicycloalkyl-(C₁-C₈ alkylenyl);

Substituted C₈-C₁₀ bicycloalkyl-(C₁-C₈ alkylenyl);

5- or 6-membered heterocycloalkyl-(C₁-C₈ alkylenyl);

Substituted 5- or 6-membered heterocycloalkyl-(C₁-C₈ alkylenyl);

8- to 10-membered heterobicycloalkyl-(C₁-C₈ alkylenyl);

Substituted 8- to 10-membered heterobicycloalkyl-(C₁-C₈ alkylenyl);

Phenyl-(C₁-C₈ alkylenyl);

Substituted phenyl-(C₁-C₈ alkylenyl);

Naphthyl-(C₁-C₈ alkylenyl);

Substituted naphthyl-(C₁-C₈ alkylenyl);

5- or 6-membered heteroaryl-(C₁-C₈ alkylenyl);

Substituted 5- or 6-membered heteroaryl-(C₁-C₈ alkylenyl);

8- to 10-membered heterobiaryl-(C₁-C₈ alkylenyl); and

Substituted 8- to 10-membered heterobiaryl-(C₁-C₈ alkylenyl);

Phenyl;

Substituted phenyl;

Naphthyl;

Substituted naphthyl;

5- or 6-membered heteroaryl;

5 Substituted 5- or 6-membered heteroaryl;

8- to 10-membered heterobiaryl;

Substituted 8- to 10-membered heterobiaryl;

R² is independently selected from:

H;

10 C₁-C₆ alkyl;

Phenyl-(C₁-C₈ alkylenyl);

Substituted phenyl-(C₁-C₈ alkylenyl);

Naphthyl-(C₁-C₈ alkylenyl);

Substituted naphthyl-(C₁-C₈ alkylenyl);

15 5- or 6-membered heteroaryl-(C₁-C₈ alkylenyl);

Substituted 5- or 6-membered heteroaryl-(C₁-C₈ alkylenyl);

8- to 10-membered heterobiaryl-(C₁-C₈ alkylenyl); and

Substituted 8- to 10-membered heterobiaryl-(C₁-C₈ alkylenyl);

Phenyl-O-(C₁-C₈ alkylenyl);

20 Substituted phenyl-O-(C₁-C₈ alkylenyl);

Phenyl-S-(C₁-C₈ alkylenyl);

Substituted phenyl-S-(C₁-C₈ alkylenyl);

Phenyl-S(O)-(C₁-C₈ alkylenyl);

Substituted phenyl-S(O)-(C₁-C₈ alkylenyl);

25 Phenyl-S(O)₂-(C₁-C₈ alkylenyl);

Substituted phenyl-S(O)₂-(C₁-C₈ alkylenyl);

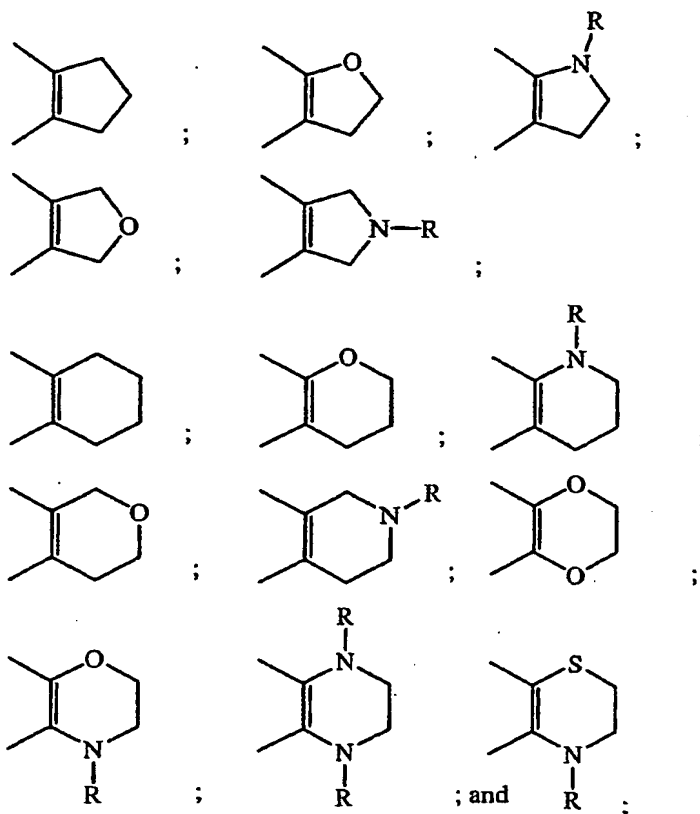
Each substituted R¹ and R² group contains from 1 to 4 substituents, each independently on a carbon or nitrogen atom, independently selected from:

C₁-C₆ alkyl;

30 CN;

AMENDED SHEET

- CF_3 ;
 HO ;
 $(\text{C}_1\text{-C}_6 \text{ alkyl})\text{-O}$;
 $(\text{C}_1\text{-C}_6 \text{ alkyl})\text{-S(O)}_2$;
5 H_2N ;
 $(\text{C}_1\text{-C}_6 \text{ alkyl})\text{-N(H)}$;
 $(\text{C}_1\text{-C}_6 \text{ alkyl})_2\text{-N}$;
 $(\text{C}_1\text{-C}_6 \text{ alkyl})\text{-C(O)O-(C}_1\text{-C}_8 \text{ alkylenyl)}_m$;
 $(\text{C}_1\text{-C}_6 \text{ alkyl})\text{-C(O)O-(1- to 8-membered heteroalkylenyl)}_m$;
10 $(\text{C}_1\text{-C}_6 \text{ alkyl})\text{-C(O)N(H)-(C}_1\text{-C}_8 \text{ alkylenyl)}_m$;
 $(\text{C}_1\text{-C}_6 \text{ alkyl})\text{-C(O)N(H)-(1- to 8-membered heteroalkylenyl)}_m$;
 $\text{H}_2\text{NS(O)}_2\text{-(C}_1\text{-C}_8 \text{ alkylenyl)}$;
 $(\text{C}_1\text{-C}_6 \text{ alkyl})\text{-N(H)S(O)}_2\text{-(C}_1\text{-C}_8 \text{ alkylenyl)}_m$;
 $(\text{C}_1\text{-C}_6 \text{ alkyl})_2\text{-NS(O)}_2\text{-(C}_1\text{-C}_8 \text{ alkylenyl)}_m$;
15 3- to 6-membered heterocycloalkyl-(G)_m;
Substituted 3- to 6-membered heterocycloalkyl-(G)_m;
5- or 6-membered heteroaryl-(G)_m; and
Substituted 5- or 6-membered heteroaryl-(G)_m;
 $(\text{C}_1\text{-C}_6 \text{ alkyl})\text{-S(O)}_2\text{-N(H)-C(O)-(C}_1\text{-C}_8 \text{ alkylenyl)}_m$;
20 $(\text{C}_1\text{-C}_6 \text{ alkyl})\text{-C(O)-N(H)-S(O)}_2\text{-(C}_1\text{-C}_8 \text{ alkylenyl)}_m$;
wherein each substituent on a carbon atom may further be independently selected from:
Halo; and
 HO_2C ;
25 wherein 2 substituents may be taken together with a carbon atom to which they are both bonded to form the group C=O ;
wherein two adjacent, substantially sp^2 carbon atoms may be taken together with a diradical substituent to form a cyclic diradical selected from:



5

R is H or C₁-C₆ alkyl;

G is CH₂; O, S, S(O); or S(O)₂;

Each m is an integer of 0 or 1;

Each W¹, W², and W³ is independently N or C-R⁴;

10 R⁴ is H, C₁-C₆ alkyl, H₂N, HO, or halo;

wherein each C₈-C₁₀ bicycloalkyl is a bicyclic carbocyclic ring that contains 8-, 9-, or 10-member carbon atoms which are 5,5-fused, 6,5-fused, or 6,6-fused bicyclic

rings, respectively, and wherein the ring is saturated or optionally contains one carbon-carbon double bond;

wherein each 8- to 10-membered heterobicycloalkyl is a bicyclic ring that contains carbon atoms and from 1 to 4 heteroatoms independently selected from 2 O, 1 S, 1 S(O), 1 S(O)₂, 1 N, 4 N(H), and 4 N(C₁-C₆ alkyl), and wherein when two O atoms or one O atom and one S atom are present, the two O atoms or one O atom and one S atom are not bonded to each other, and wherein the ring is saturated or optionally contains one carbon-carbon or carbon-nitrogen double bond, and wherein the heterobicycloalkyl is a 5,5-fused, 6,5-fused, or 6,6-fused bicyclic ring, respectively,

wherein each heterocycloalkyl is a ring that contains carbon atoms and from 1 to 4 heteroatoms independently selected from 2 O, 1 S, 1 S(O), 1 S(O)₂, 1 N, 4 N(H), and 4 N(C₁-C₆ alkyl), and wherein when two O atoms or one O atom and one S atom are present, the two O atoms or one O atom and one S atom are not bonded to each other, and wherein the ring is saturated or optionally contains one carbon-carbon or carbon-nitrogen double bond;

wherein each 5-membered heteroaryl contains carbon atoms and from 1 to 4 heteroatoms independently selected from 1 O, 1 S, 1 N(H), 1 N(C₁-C₆ alkyl), and 4 N, and each 6-membered heteroaryl contains carbon atoms and 1 or 2 heteroatoms independently selected from N, N(H), and N(C₁-C₆ alkyl), and 5- and 6-membered heteroaryl are monocyclic rings;

wherein each heterobiaryl contains carbon atoms and from 1 to 4 heteroatoms independently selected from 1 O, 1 S, 1 N(H), 1 N(C₁-C₆ alkyl), and 4 N, and where the 8-, 9-, and 10-membered heterobiaryl are 5,5-fused, 6,5-fused, and 6,6-fused bicyclic rings, respectively, and wherein at least 1 of the 2 fused rings of a bicyclic ring is aromatic, and wherein when the O and S atoms both are present, the O and S atoms are not bonded to each other;

wherein with any (C₁-C₆ alkyl)₂-N group, the C₁-C₆ alkyl groups may be optionally taken together with the nitrogen atom to which they are attached to form a 5- or 6-membered heterocycloalkyl; and wherein each group and each substituent recited above is independently selected.

2. The compound according to Claim 1, selected from:

4-[3-Oxo-7-(3-phenyl-prop-1-ynyl)-2H-isoquinolin-2-ylmethyl]benzoic acid tert-butyl ester;

4-[3-Oxo-7-(3-phenyl-prop-1-ynyl)-2H-isoquinolin-2-ylmethyl]benzoic acid;

2-(3,5-Difluoro-4-hydroxybenzyl)-7-[3-(4H-[1,2,3]triazol-4-yl)prop-1-ynyl]-2H-isoquinolin-3-one;

7-(3-Phenyl-prop-1-ynyl)-2-(4-trifluoromethylbenzyl)-2H-isoquinolin-3-one;

2-(3-Fluorobenzyl)-7-(3-phenyl-prop-1-ynyl)-2H-isoquinolin-3-one;

4-[7-(3-Imidazol-1-ylprop-1-ynyl)-3-oxo-2H-isoquinolin-2-ylmethyl]benzoic acid tert-butyl ester;

4-[7-(3-Imidazol-1-ylprop-1-ynyl)-3-oxo-2H-isoquinolin-2-ylmethyl]benzoic acid;

3-[3-Oxo-7-(3-phenyl-prop-1-ynyl)-2H-isoquinolin-2-ylmethyl]benzonitrile;

4-[3-Oxo-7-(3-phenyl-prop-1-ynyl)-2H-isoquinolin-2-ylmethyl]benzenesulfonamide;

4-[3-Oxo-7-(3-[1,2,3]triazol-1-ylprop-1-ynyl)-2H-isoquinolin-2-ylmethyl]benzoic acid tert-butyl ester;

4-[3-Oxo-7-(3-[1,2,3]triazol-1-ylprop-1-ynyl)-2H-isoquinolin-2-ylmethyl]benzoic acid;

4-[3-Oxo-7-(3-phenyl-prop-1-ynyl)-2H-isoquinolin-2-ylmethyl]benzoic acid methyl ester;

3-[3-Oxo-7-(3-phenyl-prop-1-ynyl)-2H-isoquinolin-2-ylmethyl]benzoic acid methyl ester;
2-(4-Fluorobenzyl)-7-(3-phenylprop-1-ynyl)-2H-isoquinolin-3-one;
7-(3-Phenylprop-1-ynyl)-2-(3-trifluoromethylbenzyl)-2H-isoquinolin-3-one;
2-(3-Chlorobenzyl)-7-(3-phenylprop-1-ynyl)-2H-isoquinolin-3-one;
2-(3,4-Difluorobenzyl)-7-(3-phenylprop-1-ynyl)-2H-isoquinolin-3-one;
and
4-[1-Oxo-7-(3-[1,2,4]triazol-1-ylprop-1-ynyl)-2H-isoquinolin-3-ylmethyl]benzoic acid tert-butyl ester; or
a pharmaceutically acceptable salt thereof.

3. A pharmaceutical composition, comprising a compound according to Claim 1, or a pharmaceutically acceptable salt thereof, admixed with a pharmaceutically acceptable carrier, excipient, or diluent.
4. A method for treating osteoarthritis, comprising administering to a patient suffering from osteoarthritis a nontoxic effective amount of a compound according to Claim 1, or a pharmaceutically acceptable salt thereof.
5. A method for treating rheumatoid arthritis, comprising administering to a patient suffering from rheumatoid arthritis a nontoxic effective amount of a compound according to Claim 1, or a pharmaceutically acceptable salt thereof.